BRUHATH BANGALORE MAHANAGARA PALIKE

DASARHALLI ZONE

DIVISION:- DASARAHALLI DIVISION

SUB DIVISION:- SHETTYHALLI SUB DIVISION

NAME OF WORK:- Improvements to Concrete roads in Gatepalya Shettyhalli in ward no.12, Shettyhalli Sub Division.

Estimated Cost:- 75.00 Lakhs

P code:- P1878

Estimated Cost:- 012-20-000039

Name of Work:- Improvements to Concrete roads in Gate Palya Shettyhalli in ward no.12 Shettyhalli Sub Division.

ತಾಂತ್ರಿಕ ವರದಿ

ದಾಸರಹಳ್ಳಿ ವಿಧಾನ ಸಭಾ ಕ್ಷೇತ್ರದ ವಾರ್ಡ್ ನಂ.12 ರ ಶೆಟ್ಟಿಹಳ್ಳಿ ವಾರ್ಡ್ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಬರುವ ವಾರ್ಡ್ ನಂ.12 ರ ಶೆಟ್ಟಿಹಳ್ಳಿ ವಾರ್ಡ್‌ನ ಶೆಟ್ಟಿಹಳ್ಳಿ ರೈಲ್ವೇಗೇಟ್‌ನಿಂದ ರೈಲ್ವೇ ಅಂಡರ್‌ಪಾಸ್‌ವರೆಗೂ ರೈಲ್ವೇ ಇಲಾಖೆರವರು ಅಪ್ರೋಚ್ ರಸ್ತೆಯನ್ನು ಅಭಿವೃದ್ಧಿಪಡಿಸುತ್ತಿದ್ದು, ಮುಂದುವರೆದು ರೈಲ್ವೇ ಅಪ್ರೋಚ್ ರಸ್ತೆಯಿಂದ ರಾಘವೇಂದ್ರ ಲೇಔಟ್ ಮುಖ್ಯರಸ್ತೆಯವರೆಗೂ ಅಭಿವೃದ್ಧಿಪಡಿಸುತ್ತಿದ್ದು, ಸದರಿ ರಸ್ತೆಯು ಕೆ.ಜಿ.ಹಳ್ಳಿ ಮುಖ್ಯರಸ್ತೆಯವರೆಗೂ ಸಂಪರ್ಕ ರಸ್ತೆಯಾಗಿರುತ್ತದೆ ಹಾಗೂ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪಂಗಡದ ಜನಸಂಖ್ಯೆ ಈ ರಸ್ತೆಗೆ ಹೊಂದಿಕೊಂಡಂತೆ ಇರುವ ಗೇಟ್‌ಪಾಳ್ಯದಲ್ಲಿ ಶೇಕಡ 50%ಕ್ಕಿಂತ ಹೆಚ್ಚಾಗಿ ವಾಸಿಸುತ್ತಿರುತ್ತಾರೆ. ಈ ಅನುದಾನದಲ್ಲಿ ಅಭಿವೃದ್ಧಿಪಡಿಸಲು ಸದರಿ ರಸ್ತೆಗೆ Improvements to Concrete roads in Gate Palya Shettyhalli in ward no.12 Shettyhalli Sub Division ರಸ್ತೆ ಮತ್ತು ಚರಂಡಿ ಅಭಿವೃದ್ಧಿ ಕಾಮಗಾರಿಯನ್ನು ಕೈಗೊಳ್ಳಲು ಅವಶ್ಯಕವಾಗಿರುವುದರಿಂದ ರಸ್ತೆ ಮತ್ತು ಚರಂಡಿ ಅಭಿವೃದ್ಧಿ ಕಾಮಗಾರಿಗೆ ರೂ. 75.00 ಲಕ್ಷಗಳನ್ನು ಪಿಕೋಡ್–ಪಿ1878 ರ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪಂಗಡದ 24.10% ಅನುದಾನದಲ್ಲಿ ಜಾಬ್‌ಕೋಡ್ ಸಂಖ್ಯೆ: 012–20–000039 ರಲ್ಲಿ ಅನುವು ಮಾಡಿಕೊಳ್ಳಲಾಗಿದೆ.

ಮುಂದುವರೆದಂತೆ, 2018–19 ನೇ ಸಾಲಿನ ಪಿಕೋಡ್–ಪಿ1878 ರ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪಂಗಡದವರು 24.10% ಮೀಸಲಿಡಲಾದ ಅನುದಾನದಲ್ಲಿ ಶೆಟ್ಟಿಹಳ್ಳಿ ವಾರ್ಡ್‌ನಲ್ಲಿ ಗೇಟ್‌ಪಾಳ್ಯ ರಸ್ತೆಗಳಿಗೆ ಅಭಿವೃದ್ಧಿ ಕಾಮಗಾರಿಗಳು ಅವಶ್ಯಕವಾಗಿರುವುದರಿಂದ ರಸ್ತೆ ಮತ್ತು ಚರಂಡಿ ಅಭಿವೃದ್ಧಿ ಕಾಮಗಾರಿಗೆ ರೂ. 75.00 ಲಕ್ಷಗಳ ಅನುದಾನವನ್ನು ಅನುವು ಮಾಡಿಕೊಂಡು ಈ ಕೆಳಕಂಡ ಅಂಶಗಳನ್ನು ಉಪಯೋಗಿಸಿಕೊಂಡು ಕ್ರಮವಹಿಸಲು ಅಂದಾಜಿನಲ್ಲಿ ಉದ್ದೇಶಿಸಲಾಗಿದೆ.

ಅಂದಾಜಿನಲ್ಲಿ ಈ ಕೆಳಕಂಡ ಅಂಶಗಳನ್ನು ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ.

1. Loosening, levelling and compacting original ground.
2. Compaction of original ground.
3. Excavation for roadwork in all types of soil.
4. Construction of embankment with approved material Gravel/Murrum.
5. Construction of sub-grade and earthen shoulders.
6. Providing T.M.T. steel reinforcement for R.C.C. work.
7. Providing and laying in position plain cement concrete of Mix 1:3:6.
8. Providing and laying Design mix M25.
9. Construction of granular sub-base Grading-V as Sub-base.
10. Cement Concrete Pavements KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10.
11. Constructing un-reinforced, plain cement concrete for pavements.
12. Providing and fixing RCC name board

ಮೇಲ್ಕಂಡ ಅಂಶಗಳನ್ನು ಅಳವಡಿಸಿಕೊಂಡು ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯ ಬೆಂಗಳೂರು ವೃತ್ತದ 2018–19 ನೇ ಸಾಲಿನ ದರಪಟ್ಟಿಯಂತೆ ರೂ. 75.00 ಲಕ್ಷಗಳಿಗೆ ಅತೀ ಸೂಕ್ಷ್ಮ ಮತ್ತು ಸರಳತೆ ಅನುಸರಿಸಿ ಅಂದಾಜನ್ನು ತಯಾರಿಸಲಾಗಿದೆ.

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ವಾರ್ಡ್ ನಂ.12

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ

Name of Work:- Improvements to Concrete roads in Gate Palya Shettyhalli in ward no.12 Shettyhalli Sub Division.

Sl. No.	Description of Work	Chainage from	Chainage to	Unit	No.	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-59.2. Loosening, levelling and compacting original ground supporting embankment to facilitate placement of first layer of embankment I subgrade, scarified to a depth of 150mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300-2 for embankment/subgrade including HOM construction, labour etc.. complete as per specifications. MORTH Specification No. 305.3.4 (PW,P& IWTD SR 2018-19, Pg No 147 Item No.19.66)										
	Towards SWD Culvert	0.00	170.00	Sqm	1	170.00	6.00		1020.00		
	SWD Culvert to End	185.00	427.00	Sqm	1	253.00	6.00		1518.00		
								Total	**2538**	**24.38**	**61876.44**
									Sqm		
2	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH I Chapter 3 (PW,P& IWTD SR 2018-19, Pg No 147 Item No.19.64)										
	Towards SWD Culvert	0.00	170.00	Sqm	1	170.00	6.00		1020.00		
	SWD Culvert to End	185.00	427.00	Sqm	1	253.00	6.00		1518.00		
								Total	**2538**	**6.36**	**16141.68**
									Sqm		
3	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (PW,P & IWTD SR 2018-19, Item No.19.14, Page No.143)										
	For Drains										
	Towards SWD Culvert	0.00	170.00	Cum	1	170.00	6.00	0.25	255.0		
	SWD Culvert to End	185.00	427.00	Cum	1	253.00	6.00	0.25	379.5		
	Total							**Total**	**634.50**	**43.46**	**27575.37**
									Cum		
4	KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel I murrum, watering charges & compaction by vibratory roller to 95% of modified proctors density. MORTH Specification No. 305 (PW,P& IWTD SR 2018-19, Pg No 147 Item No.19.60)										
	Towards SWD Culvert	0.00	170.00	Sqm	1	170.00	6.00	0.30	306.00		

Sl. No.	Description of Work	Chainage from	Chainage to	Unit	No.	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate in Rs.	Amount in Rs.
	SWD Culvert to End	185.00	427.00	Sqm	1	253.00	6.00	0.30	455.40		
	Total							**Total**	**761.40**	**344.50**	**262302.30**
5	KSRRB M300-55. Construction of sub-grade and earthen shoulders with approved material Gravel/Murrum with all lifts & leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table No. 300-2 complete as per specifications, including cost of earth, watering charges & compaction by vibratory roller to 97% of modified proctors density) MORTH Specification No. 305 (PW,P& IWTD SR 2018-19, Pg No 147 Item No.19.62)										
	Drain Cover Slabs										
	Towards SWD Culvert	0.00	170.00	Sqm	1	170.00	6.00	0.30	306.00		
	SWD Culvert to End	185.00	427.00	Sqm	1	253.00	6.00	0.30	455.40		
								Total	**761.40**	**369.94**	**281672.32**
6	KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 -do- TMT Bars Fe 500(PW,P& IWTD SR 2018-19, Pg No 18 Item No.4.46.2)										
	Road Formation										
	Towards SWD Culvert	0.00	170.00	Cum	1	170.00	6.00		1020.00		
	SWD Culvert to End	185.00	427.00	Cum	1	253.00	6.00		1518.00		
									2538.00		
		At 3.0 kg per Sqm						**Total**	**7.61 MT**	**75223.96**	**572755.23**
7	KSRB 4-1.7: Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.69 cum and fine aggregtes @ 0.56cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 (PW,P& IWTD SR 2018-19 P-13, I-4.7)										
	Towards SWD Culvert	0.00	170.00	Sqm	1	170.00	0.90	0.15	22.95		
	SWD Culvert to End	185.00	427.00	Sqm	1	253.00	0.90	0.15	34.16		
	Total							**Total**	**57.11**	**5714.97**	**326353.36**

Description of Work	Chainage from	Chainage to	Unit	No.	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate in Rs.	Amount in Rs.
KSRRB M2200-5.12. Providing and laying Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.7 cum and fine aggregates @ 0.47 cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008. i) Upto 5 m height. (PW,P& IWTD SR 2018-19 P-227, I-28.7.12)										
Drain Raft										
Towards ~~SWD~~ ~~Culvert~~	0.00	170.00	Cum	1	170.00	0.90	0.15	22.95		
SWD Culvert to End	185.00	427.00	Cum	1	253.00	0.90	0.15	34.16		
Drain Wall								0.00		
Towards ~~SWD~~ Culvert LHS	0.00	170.00	Cum	1	170.00	~~0.20~~	0.60	20.40		
SWD Culvert to End LHS	185.00	427.00	Cum	1	253.00	~~0.20~~	0.60	30.36		
Towards SWD Culvert RHS	0.00	170.00	Cum	1	170.00	0.20	0.60	20.40		
SWD Culvert to End RHS	185.00	427.00	Cum	1	253.00	0.20	0.60	30.36		
							Total	**158.63**	**5775.38**	**916119.65**
Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision.etc., complete as per specifications and as per the direction of Engineer-in-charge of the work. (PW,P& IWTD SR 2018-19, Pg No 153 Item No.20.5)										
Towards SWD Culvert	0.00	170.00	Cum	1	170.00	6.00	0.15	153.00		
SWD Culvert to End	185.00	427.00	Cum	1	253.00	6.00	0.15	227.70		
							Total	**380.70**	**1994.92**	**759466.04**

Sl. No.	Description of Work	Chainage from	Chainage to	Unit	No.	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate in Rs.	Amount in Rs.
10	**CONCRETE PAVEMENT** KSRRB M600- Cement Concrete Pavements KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1 ,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a hatching plant, transported to site,laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5 -do- with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with fixed form paver. (PW,P& IWTD SR 2018-19 P-174, I-22.1.2)										
	Towards SWD Culvert	0.00	170.00	Cum	1	170.00	6.00	0.150	153.00		
	SWD Culvert to End	185.00	427.00	Cum	1	253.00	6.00	0.150	227.70		
	Total								**380.70**	**3944.51**	**1501674.96**
11	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to18:383-2016, with Superplastizer at 3 Its conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades,textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. -do- with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. (PW,P& IWTD SR 2018-19, Pg No 176 Item No. 22.6.1)										
	Towards SWD Culvert	0.00	170.00	Cum	1	170.00	6.00	0.13	127.5		
	SWD Culvert to End	185.00	427.00	Cum	1	242.00	6.00	0.13	181.5		
	Total							**Total**	**309.00**	**5354.02**	**1654392.18**

Sl. No	Description of Work	Chainage from	Chainage to	Unit	No.	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate in Rs.	Amount in Rs.
12	KSRRB M2200- Providing Weep Holes 28.10 KSRRB M2200-8. Providing weep holes in Brick masonry I Plain / Reinforced concrete abutment, wing wall / return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing force. Complete as per drawing and Technical Specifications including cost of materials, labour, HOM complete as per specifications. MORTH Specification No.2706 & 2200				217	2.00			434 No	155.82	67625.88
13	Providing and fixing RCC name board of size 1.35xk0.60x0.04 mtrs fixed Each 5,500.00 in reinforced cement concrete poles of size 0.10x0.10x2.60mtrs in cement concrete M 20 proportion using 20mm and down size graded metal machine mixed with 10mm dia main steel bars and 8mm dia stirups. The board shall be provided with 12mm thick cement plaster in cement mortar 1:3 on both the sides. The poles shall be embedded in the ground for a depth of 0.5 mtrs with cement concrete M 10 proportion. The board shall be fixed as per the drawing and at the place indicated by the Engineer incharge of the work. The cost includes excavation, bare cost of all materials, cost of steel, centering, transportation charges, fixing charges, labour, HOM etc., The work shall be carried out as per the detailed specifications, drawings and directions of the Engineer in charge of the work. (PW,P& IWTD SR 2018-19, Pg No 271 Item No. 37.60)										
	Towards SWD Culvert	0.00	170.00	Cum	1				1.0		
	SWD Culvert to End	185.00	427.00	Cum	2				2.0		
								Total	3.00 No	5830.00	17490.00
									Total Cost		6465442.32
									KRIDL Charges @ 4 % On Construction cost		258617.69
									GST at 12% of Tender Amount		775853.08
									Miscellaneous & unforeseen charges		86.91
									GRAND TOTAL		7500000.00

CERTIFICATE:

i This work comes within BBMP limits

ii Certified that Personaly Inspected the Work Spot

iii Certified that the estimate is prepared based on CSR of PWD

iv Estimate is prepared Making Use of essential item of work as per site Conditions in safest way of Execution in most economical way.

v This work is not included in any other program of work.

ADMINISTRATIVELY SANCTIONED FOR Rs. 75.00 Lakh (Rupees Seventy Five Lakhs Only) Under the Head of Account ... Subject to conditions contained in Enclosed Memo No. ... Dt. 05.04.2020 Exe. Engr (DASARAHALLI) BBMP

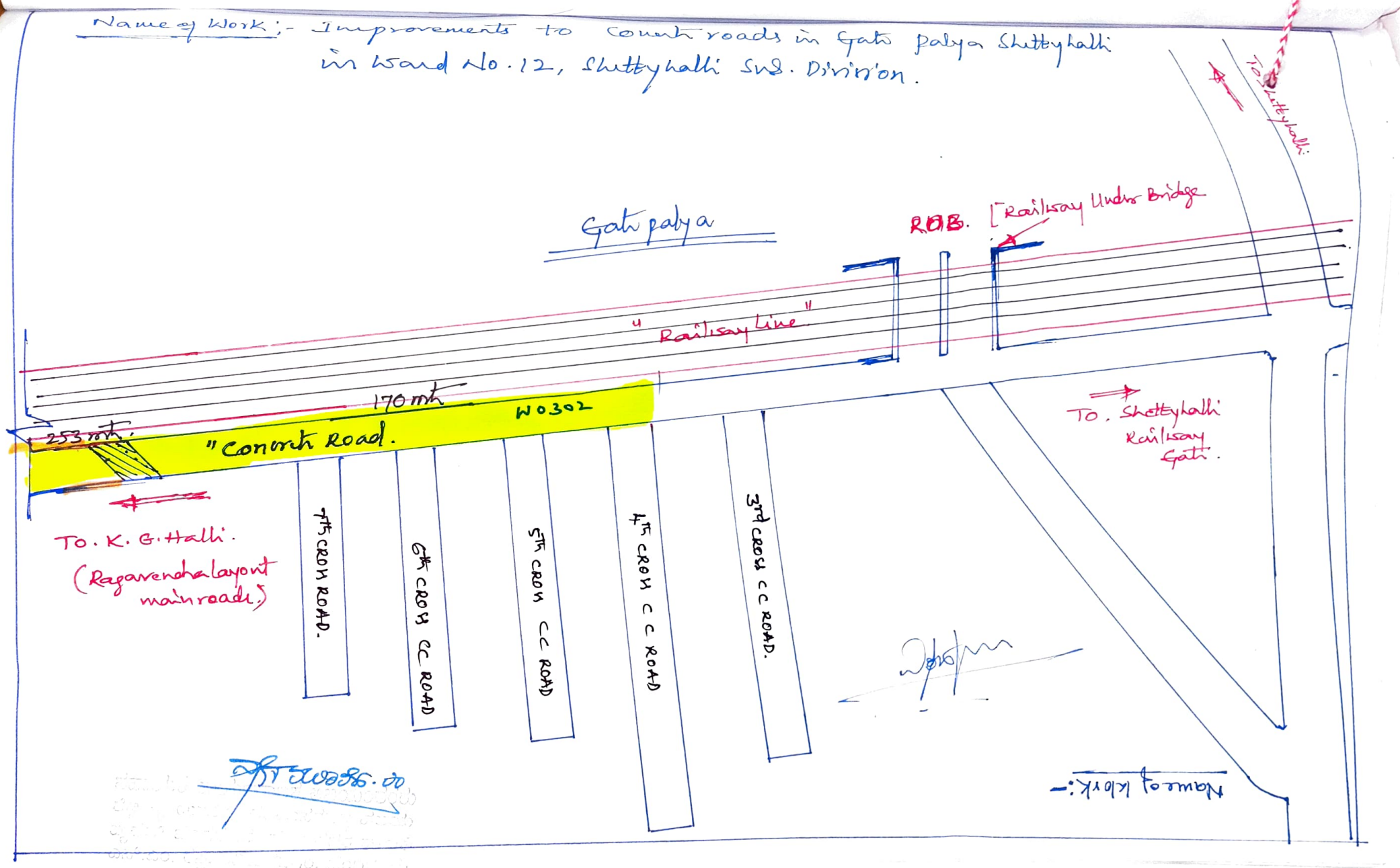
Technically Sanctioned For Rs:...75.00 Lakhs.. Rs. In Words.....Seventy five Lakhs Only Under.....SC/ST 24.10 Govt P-1878 Job Code No.....012-20-000039 Registered as SE No.....85...../.....subject to conditions contained in Enclosed Memo No.....85...../2019-20 Dt.28.08.2020. SE(D)

Assistant Engineer
Ward No.12
BBMP, Bengaluru

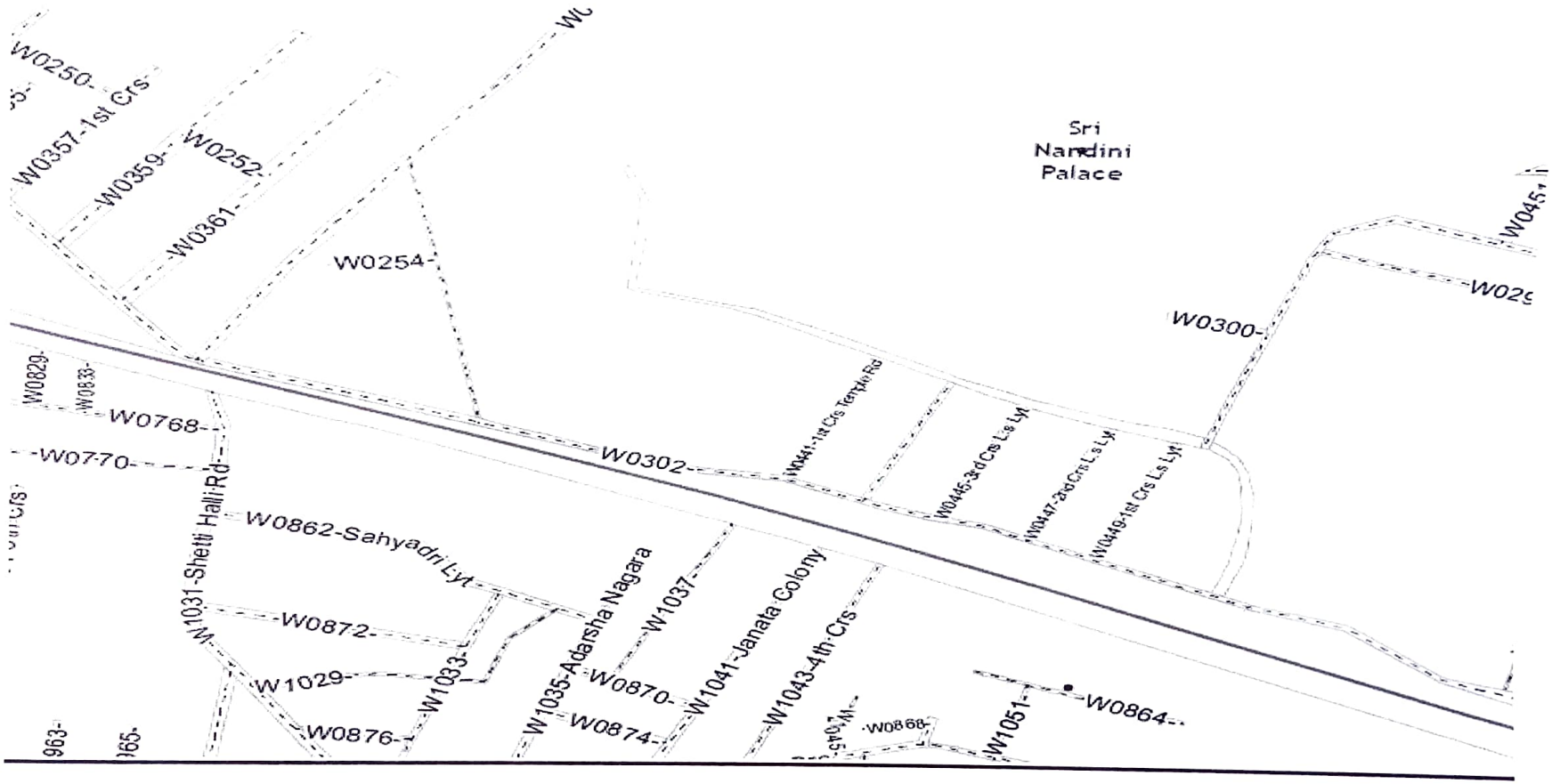
Assistant Executive Engineer
Shettyhalli Sub Division
BBMP, Bengaluru

Executive Engineer
Dasarahalli Division
BBMP, Bengaluru

Name of Work :- Improvements to Concrete roads in Gate palya Shettyhalli in Ward No. 12, Shettyhalli Sub. Division.



Name of Work:- Improvements to Concrete roads in Gate Palya Shettyhalli in ward no.12 Shettyhalli Sub Division.



Assistant Engineer
Ward No.12, Shettyhalli

Assistant Executive Engineer
Shettyhalli Sub Division